

AMENDMENTS TO THE CLAIMS:

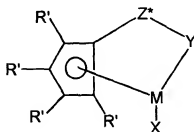
1-15. (Cancelled).

16. (New) A process for preparing copolymers of ethylene and alpha olefins having 3 to 10 carbon atoms having

- (a) a density in the range 0.900 to 0.940
- (b) an apparent M_w/M_n of 2 - 3.4
- (c) I_{21}/I_2 from 16 to 24
- (d) activation energy of flow from 28 to 45 kJ/mol
- (e) a ratio $E_a(\text{HMW})/E_a(\text{LMW}) > 1.1$, and
- (f) a ratio $g'(\text{HMW})/g'(\text{LMW})$ from 0.85 to 0.95,

said process carried out in the presence of a catalyst system comprising

(a) a metallocene complex of the general formula



wherein:

R' each occurrence is independently selected from hydrogen, hydrocarbyl, silyl, germyl, halo, cyano, and combinations thereof, said R' having up to 20 non-hydrogen atoms, and optionally, two R' groups (where R' is not hydrogen, halo or

cyano) together form a divalent derivative thereof connected to adjacent positions of the cyclopentadienyl ring to form a fused ring structure;

X is a neutral η^4 bonded diene group having up to 30 non-hydrogen atoms, which forms a \Rightarrow complex with M;

Y is -O-, -S-, -NR*, -PR*,

M is titanium or zirconium in the + 2 formal oxidation state;

Z* is SiR*₂, CR*₂, SiR*₂SIR*₂, CR*₂CR*₂, CR*=CR*, CR*₂SIR*₂, or GeR*₂,

wherein:

R* each occurrence is independently hydrogen, or a member selected from hydrocarbyl, silyl, halogenated alkyl, halogenated aryl, and combinations thereof, said R* having up to 10 non-hydrogen atoms, and optionally, two R* groups from Z* (when R* is not hydrogen), or an R* group from Z* and an R* group from Y form a ring system,

(b) a borate, and

(c) a support.

17. (New) The process of claim 16 wherein the metallocene complex is a titanium complex.

18. (New) The process of claim 17 wherein the metallocene complex is (t-butylamido) (tetramethyl- η^5 - cyclopentadienyl) dimethyl silanetitanium- η^4 -1,3-pentadiene.

19. (New) The process of claim 16 wherein the borate comprises the reaction product of (A) an ionic compound comprising a cation and an anion wherein the anion

has at least one substituent comprising a moiety having an active hydrogen and (B) an organometal or metalloid compound wherein the metal or metalloid is from Groups 1-14 of the Periodic Table.

20. (New) The process of claim 16 wherein the support is silica.

21. (New) The process of claim 16 wherein the alpha olefin is 1-hexene.

22. (New) The process of claim 16 wherein the process is carried out continuously in the gas phase.